



Topics for discussion

Guidance for the speakers and panellists

Background

ENEf is a forum for broad discussion among all EU stakeholders on the opportunities and risks of nuclear energy. These discussions are linked to the energy challenges faced by the EU and its Member States and in particular to the role of nuclear energy within the Strategic framework for the Energy Union.

The underlying topics for the 2019 plenary are:

1. **Ageing and long term operation of nuclear power plants in Europe - challenges and opportunities**
2. **"2050 Long term strategy"**, as recently outlined in the strategic long-term vision for a prosperous, modern, competitive and climate-neutral economy by 2050 – A Clean Planet for All¹.

Panel 1 – Ageing and long term operation of nuclear power plants in Europe - challenges and opportunities

On 4 October 2018, ENSREG approved the [report² on the first topical peer review 'Ageing management of nuclear power plants and research reactors'](#) and related [country specific findings](#). This topical peer review is **the most important safety-related exercise after the post-Fukushima stress tests in Europe**.

The timely and effective completion of this review highlights the **continuous improvement of nuclear safety** in the EU and neighboring countries. In total, **19 countries (16 EU countries, Norway, Ukraine, and Switzerland)** participated in the peer review. The process will now continue with the establishment of **national action plans** addressing the peer review results.

¹ A Clean Planet for All; European Commission, 28.11.2018, COM(2018) 773 final

² <http://www.ensreg.eu/eu-topical-peer-review>



The subject of the first review (ageing management) was chosen on the basis of the age profile and the potential long term operation of European nuclear power plants. The exercise was developed by ENSREG with the technical support of the Western European Nuclear Regulators Association. The licensees made **self-assessments**, based on which national regulators prepared the **National Assessment Reports**, published at the end of 2017. In January 2018, these reports were made available for **questions and comments from stakeholders**. More than 2300 questions were asked by peer reviewers, experts and civil society when reviewing the reports. In May 2018, ENSREG organized a **one-week workshop** involving around 140 experts to discuss the results of the self-assessments, the questions and comments on the national reports, as well as the replies to the questions.

Speakers and participants at ENEf are invited to provide their view on the following questions:

- What are your (organisation's) views related to the long-term operation of nuclear power plants in Europe?
- What is your (organisation's) view on the role (if any) of the international topical peer review compared to national assessments and licensing?
- How does the risk profile of nuclear reactors change as lifetime is extended by 20 or more years? Does it change depending on whether one goes from 30 to 50 years or 60 to 80 years?
- In terms of public acceptance, nuclear LTO comes with a relatively high approval among the public in the closest vicinity of NPPs as people are used to the operating power plant. What role should public acceptance play in the process of pursuing nuclear LTO and what conclusions can be drawn from this fact?
- Is the safety regulatory regime strong enough to withstand cost reduction pressures (cheap renewables) and installation "sweating" incentives (as seen in some privatised infrastructure fields such as railway) over time?

Panel 2 – 2050 Long term strategy

The European strategic long-term vision for a prosperous, modern, competitive and climate neutral economy, referred to as A Clean Planet for All, was presented by the Commission on



28 November 2018, ahead of COP 24 in Katowice. The strategy builds on the new EU 2030 targets. It explores pathways for the EU that achieve greenhouse gas emissions reductions between -80% by 2050 (compared to 1990) up to net zero greenhouse emissions by 2050 – all of them are in line with the Paris Agreement’s commitments of holding global average temperature increase well below 2°C and pursuing efforts to limit it to 1.5°C). Scenarios are used for projection about demand and supply of energy (including land use). Eight scenarios analyse different technology pathways (high electrification, high energy efficiency, circular economy, etc.). The starting point of all scenarios is the technologies already available, massive expansion of energy efficiency, renewables and batteries.

Speakers and participants at ENEf are invited to provide their view on the following questions:

- What is your (organization’s) view on the role of nuclear energy in European long - term energy strategy? How would you ensure a smooth transition to a low-carbon future? What measures would you take?
- How is the industry preparing to deliver at least 15% of the electricity mix in 2050 in line with the LTS?
- How do you understand the tension between energy savings on one hand and the expected electrification rates on the other hand?
- Where would you expect the price of emission abated if the decarbonisation relies on nuclear?
- What is the future of nuclear given rapidly declining costs of renewables and the rise of smart grids, batteries, and sector-coupling (use e-vehicles as batteries for balancing the grid)?
- Energy transition requires the fundamental transformation of our economies, with deep social implications. As the urgency of GHG reduction increases, the importance of citizen participation and ownership of this process becomes ever more pertinent. How can this be achieved with nuclear power as a centralized industry in the hands of few, with a rather patchy historical record of openness and citizen participation? How does this play out in a time of populist challenges against concentrated economic and political elites?